

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1-30. Cancelled.
31. (New) A mobile computing device, comprising:
a memory;
a display configured to display in more than one display mode;
a display controller coupled to the display and comprising an internal display memory;
a processor coupled to the memory and the display controller, wherein one of the processor and display controller is configured to operate display logic configured to change the display mode,
wherein in a first display mode the display controller is configured to retrieve a first amount of information from the memory to be displayed on the display, and
in a second display mode the display controller is configured to retrieve a second amount of information smaller than the first amount of information from the internal display memory to be displayed on the display.
32. (New) The mobile computing device of Claim 31, wherein the first amount of information is sufficient for displaying rich color and high resolution on the display and the second, smaller amount of information is for displaying low color and low resolution on the display.
33. (New) The mobile computing device of Claim 32, wherein in the second mode only textual types of graphical information are displayed.
34. (New) The mobile computing device of Claim 31, wherein the processor is configured in the first mode to operate a first application stored in memory and in the second mode to operate a second application stored in memory.

35. (New) The mobile computing device of Claim 31, wherein the display logic is configured to change the display mode based on requirements dictated by an operating system running on the processor.

36. (New) The mobile computing device of Claim 31, wherein in the second mode the memory is powered down.

37. (New) The mobile computing device of Claim 31, wherein the internal display memory comprises random access memory.

38. (New) The mobile computing device of Claim 31, wherein the mobile computing device comprises a wireless data communications device, wherein the processor is configured to synchronize data with a computer.

39. (New) The mobile computing device of Claim 31, further comprising a cellular telephone.

40. (New) A display controller, comprising:
an internal display memory;
display logic configured in a first display mode to retrieve a first amount of information from a memory to be displayed on a display and in a second display mode to retrieve a second amount of information smaller than the first amount of information from the internal display memory to be displayed on the display.

41. (New) The display controller of Claim 40, wherein the first amount of information is sufficient for displaying rich color and high resolution on the display and the second, smaller amount of information is for displaying low color and low resolution on the display.

42. (New) The display controller of Claim 40, wherein the display controller is configured to change modes based on logic operating on a processor coupleable to the display controller.

43. (New) The display controller of Claim 40, wherein the second mode is a low power mode.

44. (New) The display controller of Claim 40, wherein the internal display memory comprises random access memory.

45. (New) A method of refreshing a display, comprising:
in a first display mode, retrieving a first amount of information from a first memory device to be displayed on the display, and
in a second display mode, retrieving a second amount of information smaller than the first amount of information from a second memory device to be displayed on the display.

46. (New) The method of Claim 45, wherein the first memory device is a main memory for an electronic device and the second memory device is an internal display memory of a display controller.

47. (New) The method of Claim 45, wherein the first amount of information is sufficient for displaying rich color and high resolution and the second, smaller amount of information is for displaying low color and low resolution on the display.

48. (New) The method of Claim 45, wherein in the second mode only textual types of graphical information are displayed.

49. (New) The method of Claim 45, wherein in the second mode the first memory device is powered down.

50. (New) The method of Claim 45, further comprising synchronizing data with a computer over a wireless communication interface.